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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/706,894

11/13/2003

Iulia Rusu

IR-2389 (2-3731)

7760

7590

05/04/2005

Attn: Kourosh Salehi
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EXAMINER

MIS, DAVID C

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,894

Applicant(s)

RUSU ET AL.

Examiner

David Mis

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 0618.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the labels are too small and blurred, the lines are blurred, and the plots (Figures 6 and 7) are totally black. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

2. The drawings are objected to because Figure 1 shows that the "SSN" input to logic 15 is connected to the "VCC" power rail, while figure 2 shows "SSN" is used as a logic input (as well as a power input) to logic 15. If the power is logic "0", then logic 15 would not operate (and neither would the rest of the devices). So, the "SSN" level does not make sense. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary,

the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the

1.) "frequency ranges" of claim 1, line7; Figure 1 only shows selection between 2 current sources for charging at two slopes during each charge interval, with the change in slopes being determined by a control voltage "VVCO", which voltage changes the oscillator frequency but does not provide a change between oscillator frequency "ranges" (bands).

2.) "varying at least one" of claim 6, line6; the drawings only cover varying both intervals. When VVCO changes, both intervals change.

3.) "output ranges" of claim 9; (same/similar as the above "frequency ranges" language in that output frequency ranges or other ranges are not provided).

4.) "adjustable timing device" of claim 13; the capacitor is not shown to be adjustable. No other depicted elements were specified in a manner similar to the terminology "timing device", like for example "timing element" or the like.

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be

labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The disclosure is objected to because of the following informalities:

The disclosure suggests that frequency ranges are provided by changing the minimum and maximum values for "VVC0" (for example: page 5, lines 14-16), however this is not supported in the drawings and so it is not clear if the suggestion can be correctly interpreted.

On page 6, lines 22-29, paragraph [0024] does not correctly employ the terminology "frequency ranges". If the slope is changed from a first slope to a second slope at varying places in the charge interval, then the frequency is changed, not the frequency range. Variable or more selectable current supplies would be necessary to select from different first and / or second slopes for there to be range (band) changes. Switching between I50 and I250 does not change the frequency range. If the specification intended that more current sources than I50 and I250 should be used, it does not specifically say. Also, the drawings do not support this.

On page 7, lines 3-5, do not make sense because the drawings do not show VG25 and VG50 supplied to any other components other than MP2 and MP8 to switch between different ranges (ranges discussed above) of oscillator frequency output.

Appropriate correction is required.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, because the best mode contemplated by the inventor has not been disclosed. Evidence of concealment of the best mode is based upon there being no drawings showing claimed embodiments (said above:

1.) "frequency ranges" of claim 1, line7; Figure 1 only shows selection between 2 current sources for charging at two slopes during each charge interval, with the change in slopes being determined by a control voltage "VVCO", which voltage changes the oscillator frequency but does not provide a change between oscillator frequency "ranges" (bands).

2.) "varying at least one" of claim 6, line6; the drawings only cover varying both intervals. When VVCO changes, both intervals change.

3.) "output ranges" of claim 9; (same/similar as the above "frequency ranges" language in that output frequency ranges or other ranges are not provided).

4.) "adjustable timing device" of claim 13; the capacitor is not shown to be adjustable. No other depicted elements were specified in a manner similar to the terminology "timing device", like for example "timing element" or the like.), and upon the specification not specifically describing any circuitry for the above said claimed embodiments.

7. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification did not specifically describe any circuitry for the above said claimed embodiments.

8. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification did not specifically describe any circuitry for the above said claimed

embodiments, and one of ordinary skill in the art would not have construed the claimed embodiments from that which was described, not even given the claim language.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite since:

In claim 1, it is not clear if the oscillator comprises the switching circuit because that is not specifically said. The claim specifically says that the oscillator "comprising: a switching control", which is a function. The claim is for an "integrated circuit with an oscillator" and there are no means clearly said to be in the circuit. It is not clear if the "switching control for" is a means because -switching control means - is not said. It is not clear if, in "for controlling a switching circuit" and "the switching circuit operable", the "switching circuit" itself is claimed to be in the integrated circuit or the oscillator because the "switching circuit" is only indirectly mentioned. Also, "plurality of operational ranges" is misdescriptive since the different rates of charging at the two different intervals only affect the oscillator frequency

and do not affect the oscillator frequency ranges, and do not amount to a plurality which is two or more.

In claim 2, "the switching control" is a comparator" does not make sense because the "switching control" is a function while the "comparator" is a means.

In claim 6, "combining the first time interval and the second time interval to obtain an oscillation frequency" is misdescriptive since those two time intervals only make up on half of the period of oscillation and therefor posses insufficient value to determine the frequency. Also, "varying at least one of" is misdescriptive since both are varied.

In claim 9, line 2 "timing component" and line 3 "timing element" terminology is confusing. Also, "cumulative timing sources" is misdescriptive since the timing sources are not accumulated.

In claim 13, "an adjustable timing device" is misdescriptive because the timing element terminology is clearly specified as referring to the capacitor (claim 11) and no other "device" is specified by similar terminology, and the capacitor is not adjustable. Also, "indicative of a value" is misdescriptive since the capacitor voltage value is the output value rather than just indicative of it. Also, "the control output being operable to influence the timing device input to select the second slope" does not make sense since the timing device (capacitor) input does not select the slope and since any

other "input" does not in itself embody a selector, and a selector is required "to select the second slope" rather than -to influence the selection of the second slope--.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Mis whose telephone number is (571)272-1765. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'David Mis', is positioned above the printed name.

David Mis
Primary Examiner
Art Unit 2817